

nected with the diorites of that area, and the new showing of nickeliferous pyrrhotite on the same island has a large mass of diorite close to the development of the ore. These diorite and granite masses in this locality clearly break through the associated crystalline limestone and associated gneiss.

As for copper, the Ottawa district has as yet failed to produce anything of economic importance, but the silver-bearing galenas of Lake Temiscaming which have been opened up, appear to have a somewhat extensive development, though mining in this quarter has of late years languished. In the Wanapetae district however, which is on the western border of the Ottawa basin, very valuable deposits of rich gold ore have been recently exploited and are now being worked with good prospects of profitable returns.

COAL.

Coal, of course, has never been found in the Ottawa country, though scarcely a year goes by without the usual newspaper paragraph to the effect that a large bed of this mineral has been discovered in the area to the north of the upper St. Lawrence. To many, this absence of coal has seemed a mystery, and of late several severe attacks have been made upon the scientific authorities in connection with deposits of so-called coal in the Sudbury district to which the attention of everyone was recently directed. The true coals of the eastern provinces are confined almost entirely to the middle portion of the Carboniferous system, which lies at a much higher position in the geological scale than any of the rock formations of Ontario, which do not reach above the horizon of the Devonian. In one area in New Brunswick in this last formation there is a deposit of graphitic anthracite which has a thickness of several feet and which was persistently boomed for some years, and caused a lot of money to be wasted in an attempt to place it on the market as a first-class fuel. This hope has never been realized from the fact that the mineral contained too great a percentage of ash and graphite to burn well, the amount of residue after combus-